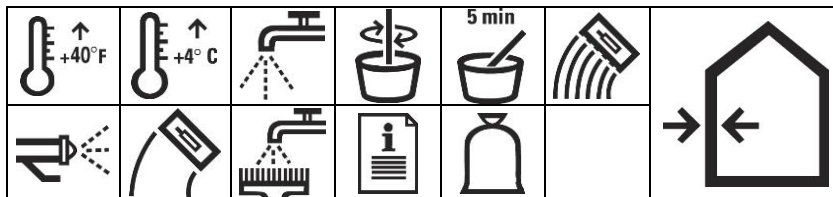


# Sto BTS® Plus

80727 Sto BTS Plus



## Technical Data

REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
<b>Surface Burning</b>	ASTM E-84	< 25 Flame Spread < 450 Smoke Developed	0 5
<b>Combustibility</b>	CAN/ULC S114	No flaming Mean temperature rise: <36°C Mass loss: < 20%	Noncombustible
<b>Adhesion (psi)</b>	ASTM C-297 Modified	28 days	> 30 Gypsum Sheathing* > 15 EPS Board* > 100 Concrete Block > 40 Dens-Glass® Gold** > 100 Concrete
<b>Impact Strength</b>	EIMA 101.86	Standard Impact Classification	Pass

\* Failure of substrate  
\*\* Dens-Glass Gold is a registered trademark of the G-P Gypsum Corp.

Sto BTS Plus is a one-component, polymer-modified, cement based, dry powder material used as an adhesive and base coat in Sto Wall Claddings, including StoTherm ci Classic and StoTherm ci Lotusan Systems. It is specially designed to provide for the recommended minimum 1/16" base coat thickness in a single application.

**Coverage**  
"Through the wall": 5.1-7.0 m<sup>2</sup> (55-75 ft<sup>2</sup>) per bag (when used for both adhesive and base coat applications).

As an adhesive over sheathing and smooth masonry:  
8.4-12.5 m<sup>2</sup> (90-135 ft<sup>2</sup>) per bag, applied with a 13 mm x 13 mm (1/2" x 1/2") U-notched trowel having 51 mm (2") spread between notches.  
As an adhesive over rough or uneven masonry: 2.8-4.2 m<sup>2</sup> (30-45 ft<sup>2</sup>) per bag, applied with a 16 mm x 16 mm (5/8" x 5/8") square-notched trowel having 16 mm (5/8") spread between notches.  
As a base coat: 7.4-11.6 m<sup>2</sup> (80-125 ft<sup>2</sup>) per bag.  
As a skim coat: 8.4-12.5 m<sup>2</sup> (90-135 ft<sup>2</sup>) per bag.  
Coverage may vary depending on application technique and surface conditions.

## Features Benefits

Features	Benefits
1 <b>One-component</b>	Ready to use; easily mixed with water on the job site
2 <b>Polymer-modified</b>	Excellent adhesion; increases durability and freeze/thaw resistance
3 <b>High polymer/cement ratio</b>	Improved flexural strength; resists cracking
4 <b>Creamy smooth consistency</b>	Trowels easily; increases job site productivity
5 <b>Vapor permeable</b>	Allows substrate to breathe naturally; resists blisters caused by trapped vapor
6 <b>High build</b>	Labour savings; can be applied to 1.6 mm (1/16") thickness in one application with standard reinforcing mesh
7 <b>Factory blended Portland cement</b>	Assures performance mix ratio
8 <b>Low cement ratio</b>	Less alkalinity, less free lime, less efflorescence
9 <b>Bagged powder product</b>	Less solid waste than pails; freezing protection not required prior to mixing

## Surface Preparation

**As an adhesive**  
**StoGuard® Air/Moisture Barrier:** ensure surface is clean, dry and free of surface contamination. Install StoTherm ci insulation board with adhesive within 30 days of the application of Sto Gold Coat, or clean the surface and recoat with Sto Gold Coat.

**Concrete or Masonry:** surfaces must be clean, dry and free of frost, damage and all bond-inhibiting materials, including dirt, efflorescence, laitance, form oil and other foreign matter. Loose or damaged material must be removed by water blasting, sandblasting or mechanical wire brushing and repaired. Avoid application over irregular surfaces. Resurface, patch or level surfaces to required tolerance and smoothness with appropriate Sto leveling materials. Refer to ASTM D-4258 and ASTM D-4261 for complete details on preparing cementitious substrates for coatings.

**Packaging**  
21.3 kg bag (47 lb.)

**Shelf Life**  
12 months, if protected from moisture and properly stored.

**Storage**  
Store off the ground in a dry area. Protect from direct sunlight, extreme heat [32°C (90°F)], moisture and freezing.

## Sto BTS® Plus

### Surface Preparation cont.

**Glass Mat Gypsum Sheathing in Compliance with ASTM C 1177:** ensure surface is clean, dry and free of surface contamination. Sheathing must be installed and protected in accordance with manufacturer's and building code requirements. Remove and replace weather-damaged sheathing. Avoid application over irregular, out of plane surfaces. Install StoTherm ci insulation board with adhesive within 30 days of installation of the sheathing.

### Mixing

Use 4.7-6.2 L (5-6.5 quarts) of water per 21.3 kg bag (47 lb.). Mix automatically using Sto's S-25 Continuous Mixer, or mix manually by adding one 21.3 kg (47 lb.) bag of Sto BTS Plus to 4.7-6.2 L (5-6.5 quarts) of clean, potable water in a clean mixing pail. Mix with a clean, rust-free electric drill and paddle.

### Application

Apply only to sound and clean, dry, properly prepared, frost-free surfaces.

**As an adhesive:** Apply to the back of the insulation board with the appropriate size notched trowel. When using Sto's M-8 Spray pump apply directly onto the substrate. Form uniform ribbons of adhesive parallel to the short dimension of the board so the ribbons are oriented vertically in relation to the plane of the wall. Immediately install the board horizontally with staggered joints and apply firm pressure over the entire board surface. Do not delay installation once adhesive is applied.

**As a base coat:** Apply with spray equipment such as Sto's M-8 Spray Pump or apply manually with a stainless steel trowel to an approximate thickness of 3 mm (1/8"). Work horizontally or vertically in strips of 1 m (40") and immediately embed Sto Mesh in the wet Sto BTS Plus by troweling from the center to the edges of the mesh. Avoid wrinkles in the mesh and smooth the base coat to eliminate trowel marks.

### Limitations

- Use Sto BTS Plus only when surface and ambient temperatures are above 4°C (40°F) during application and drying period.
- Sto BTS Plus should not be used on weather-exposed horizontal or below grade surfaces or where immersion in water may occur.
- Sloped surfaces: Refer to Sto details.
- Sto BTS Plus should not be used as a finish coating. It should not be used over wood surfaces except for wood sheathing surfaces protected with StoGuard®.
- Prevent rapid loss of moisture from exposure to direct sun, wind and high temperatures.

### As a base coat

**StoTherm ci Insulation Board:** insulation must be rasped and free of all bond inhibiting materials. **Concrete or Masonry:** surfaces must be clean, dry and free of frost, damage and all bond-inhibiting materials, including dirt, efflorescence, laitance, form oil and other foreign matter. Loose or damaged material must be removed by water blasting, sandblasting or mechanical wire brushing and repaired.

Allow to set approximately five minutes, adjust mix if necessary, by adding up to 0.35 L (12 fl. oz.) of water per bag, remix to a uniform consistency. Avoid retempering after mixing of product. Do not exceed maximum amount of water in mix ratio.

Minimum recommended thickness of the reinforced base coat is 1.6 mm (1/16") when dry. Reapply additional base coat if necessary to achieve minimum thickness as soon as the first application is dry.

**As a skim coat:** Apply in one application to a maximum thickness of 1.6 mm (1/16") to the prepared surface and smooth the surface.

### Curing/Drying

Dries within 24 hours under normal drying conditions [21°C (70°F), 50% RH]. Allow additional drying time during cold, humid, or wet weather until insulation board is fully adhered before rasping, and before application of primer or finish to hardened Sto BTS Plus. Protect from rain and freezing until completely dry. Sto recommends priming using the appropriate Sto Primer prior to application of finish.

### Clean Up

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

### Health And Safety

#### Health Precaution

Contains Portland cement and crystalline silica. Avoid breathing dust. As with any chemical construction product, exercise care when handling. **DANGER!**

Causes serious eye damage and/or skin irritation. May cause an allergic skin reaction, respiratory irritation, drowsiness or dizziness.

#### Safety Precaution

Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

#### First Aid:

**EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eye lids with fingers. Get immediate medical attention.

**SKIN CONTACT:** Immediately wash skin with plenty of soap and water for at least 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

**INHALATION:** If inhaled, remove to fresh air. If not breathing give artificial respiration or give oxygen by trained personnel. Seek medical attention immediately.

**INGESTION:** If swallowed, do NOT induce vomiting. Call a physician or a poison control center immediately. Never give anything by mouth to an unconscious person.

#### Spills

Collect in an appropriate container. Uncured material may be removed with water.

#### Disposal

Dispose of in accordance with local, state or federal regulations.

#### Warning

**KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY.** Consult the Safety Data Sheet for further health and safety information.

Safety Data Sheet (SDS) is available at [www.stocorp.com](http://www.stocorp.com)

#### LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.

Refer to Sto Specifications for more complete information on proper use and handling of this product.

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#### Attention

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the non-performance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Canada Ltd. website, [www.stocanada.com](http://www.stocanada.com).